

WHAT IS CLAIMED IS:

1. A method for controlling a robot, comprising:
attaching, to said robot, a first ultra wideband impulse
5 radio unit;
determining a position of said robot based upon the
interaction of said first ultra wideband impulse radio and at
least two of a plurality of reference ultra wideband impulse
radio units; and
10 controlling the actions of said robot based on said
position.
2. The method of claim 1, further comprising:
enabling said first ultra wideband impulse radio unit to
15 receive sensor information from at least one sensor,
wherein the actions of said robot are controlled based on
said position and said sensor information.
3. The method of claim 2, wherein said sensor information
20 is in video form.
4. The method of claim 2, wherein said as least one
sensor monitors the environment within a building.
- 25 5. The method claim 1, wherein said position is
determined by at least one of said robot and one of said
plurality of reference ultra wideband impulse radio units.

6. The method of claim 1, further comprising:

receiving, at a control station, impulse radio signals from said first ultra wideband impulse radio unit containing information,

5 wherein the control station uses at least a portion of the received information and said position to control the actions of said robot.

7. The method of claim 6, wherein said position is
10 determined by at least one of said robot, said control station, and one of said plurality of reference ultra wideband impulse radio units.

8. The method of claim 6, further comprising:

15 enabling said control station to receive sensor information from at least one sensor,

wherein the actions of said robot are controlled based on said position and said sensor information.

20 9. The method of claim 1, wherein said first ultra wideband impulse radio unit further includes an ultra wideband radar capability.

10. The method of claim 9, further comprising:

25 detecting an object using said ultra wideband radar capability.

11. The method of claim 10, wherein said object is one of a land mine and a person.

12. The method of claim 11, wherein the location of said object is determined using said ultra wideband radar capability.

5 13. The method of claim 12, wherein said location is determined relative to said position.

14. The method of claim 1, wherein said robot is one of a toy, a security robot, an industrial robot, a welder, a manufacturer, a micro airplane, a micro ground vehicle, a lawn
10 mower, a vacuum sweeper, a land mine, and an unmanned vehicle.

15. A system comprising:
a robot including a first ultra wideband impulse radio
15 unit;

a plurality of reference ultra wideband impulse radio units, at least two of which interact with said first ultra wideband impulse radio to determine a position of said robot that can be used to control the actions of said robot.

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16. The system of claim 15, further comprising:

at least one sensor interfaced with said robot, said at least one sensor providing sensor information that can be used in conjunction with said position to control the actions of said
25 robot.

17. The system of claim 16, wherein said sensor information is in video form.

18. The system of claim 16, wherein said as least one sensor monitors the environment within a building.

19. The system of claim 15, wherein said position is
5 determined by at least one of said robot and one of said plurality of reference ultra wideband impulse radio units.

20. The system of claim 15, further comprising:

10 a control station configured to receive impulse radio signals from said first ultra wideband impulse radio unit containing information that can be used in conjunction with said position to control the actions of said robot.

21. The system of claim 20, wherein said position is
15 determined by at least one of said robot, said control station, and one of said plurality of reference ultra wideband impulse radio units.

22. The system of claim 20, further comprising:

20 at least one sensor interfaced with said control station, said at least one sensor providing sensor information that can be used in conjunction with said position to control the actions of said robot.

23. The system of claim 15, wherein said first ultra
25 wideband impulse radio unit further includes an ultra wideband radar capability.

24. The system of claim 15, wherein said robot is one of a toy, a security robot, an industrial robot, a welder, a manufacturer, a micro airplane, a micro ground vehicle, a lawn mower, a vacuum sweeper, a land mine, and an unmanned vehicle.